

From boatanchors@theporch.com Thu Oct 24 22:20:48 1996  
From: w1nml@juno.com (Lock Pingree)  
Subject: 2 Meter VFO  
Message-ID: <19961024.104504.7031.1.w1nml@juno.com>

I picked up a Johnson 2 Meter VFO recently that is in need of a lot of TLC.  
Wonder if anyone on the list might have a manual and/or a schematic for this thing.  
Will pay the usual copying, mailing.....etc.  
TIA

Lock Pingree W1NML (ex KB7TQ)  
AMI # 639  
Phoenix, AZ  
w1nml@juno.com

From boatanchors@theporch.com Thu Oct 24 08:06:25 1996  
From: KB9VU@aol.com  
Subject: 30L1 question  
Message-ID: <961024042834\_1946479151@emout15.mail.aol.com>

Anyone with experience using 572B's in a Collins 30L1? Like to know any particulars. It looks like it will work but being a cautious type....

Thanks

Mike - KB9VU

From boatanchors@theporch.com Thu Oct 24 08:06:25 1996  
From: Steve Ellington <n4lq@iglou.com>  
Subject: Re: 30L1 question  
Message-ID: <Pine.GS0.3.93.961024074449.26675A-100000@iglou1>

I've heard it's been done but don't expect to take advantage of the extra power. The fan in that amplifier is a wimp. I would replace it with a more muffin fan. Actually, any 30L1 needs a bigger fan.

> Anyone with experience using 572B's in a Collins 30L1? Like to know any  
> particulars. It looks like it will work but being a cautious type....

>

> Thanks

>

> Mike - KB9VU  
>

Steve Ellington N4LQ@IGLOU.COM Louisville, Ky

From boatanchors@theporch.com Thu Oct 24 08:06:25 1996  
From: "William B. Ross" <billross@txdirect.net>  
Subject: Re: 30L1 question  
Message-ID: <326F5B29.7BE2@txdirect.net>

I used the 572B in a 30L1 in the 70s with excellent results. It required retuning the input circuits to match the slightly different input impedance.

They should be loaded utilizing the same current readings as the 811As. As you might imagine, there is no power out advantage but the higher plate dissipation reduces "quick sweats" one gets when tuning up the overpushed 811As. Look! No red plates!!

Bill K5LLK

From boatanchors@theporch.com Thu Oct 24 12:40:17 1996  
From: 4CX250B@miavx1.acs.muohio.edu  
Subject: Re: 30L1 question  
Message-ID: <v03007803ae954f4eefde@[134.53.5.143]>

>Anyone with experience using 572B's in a Collins 30L1? Like to know any  
>particulars. It looks like it will work but being a cautious type....  
>  
>Thanks  
>  
>Mike - KB9VU

Hi Mike,

572Bs will work just fine in a 30L-1. They have the same filament (voltage and current) requirements, are physically just a smidgen smaller, but have a substantially increased plate dissipation (160 Watts instead of 65W). The 572B will handle an extra 1000 volts on the plate beyond the 811A. The transconductances of the two tubes are just about identical, as are the transfer characteristics.

That said, I wouldn't waste my money. The 30L-1 doesn't have the reserve power supply capacity to take advantage of the increased power dissipation of 572Bs. The 30L-1 is very well matched to the original 811A tubes, and

you won't gain any advantage in making the substitution. In a 30L-1, the life expectancy of both tubes would be the same, as would the power output. I'd spend your dollars on an extra set of 811As and forego the 572Bs.

73,

Jim W8ZR

From boatanchors@theporch.com Thu Oct 24 08:06:25 1996

From: "Brian Carling" <bry@mnsinc.com>

Subject: 4-400Z (?) tube in Grounded-grid service

Message-ID: <199610240227.WAA13508@user2.mnsinc.com>

Sandy Blaize writes in BA:

>The 4-400 will run very well "ground grid" (the screen  
>too!), but it requires more drive than the 3-400 or 3-500. Also in  
>some instances there will be a 'mechanical problem', as ...

Guys I wonder if anyone has ever tried using tubes like 807, 1625, 6L6 etc. in a grounded grid amplifier circuit?

Is there any reason why this couldn't be done?

73 from Radio AF4K / G3XLQ in Gaithersburg, MD USA

bry@mnsinc.com

\*\*\* See the great ham radio resources at:

<http://www.mnsinc.com/bry/>

From boatanchors@theporch.com Thu Oct 24 08:06:25 1996

From: Bob Roehrig <bproehrig@admin.aurora.edu>

Subject: Re: 4-400Z (?) tube in Grounded-grid service

Message-ID: <Pine.ULT.3.95.961023230001.4440C-100000@admin.aurora.edu>

On Wed, 23 Oct 1996, Brian Carling wrote:

> Guys I wonder if anyone has ever tried using tubes like 807, 1625,  
> 6L6 etc. in a grounded grid amplifier circuit?  
> Is there any reason why this couldn't be done?

807's or 1625's were used in G-G circuits but as I recall, you had to remove the base and disconnect the beam forming element lead from the cathode (or some such thing). Apparently, they won't work as is.

I just built an amp using four 807's but am using an untuned input. Grid circuit has a torroidal autotransformer to select drive level

and the toroid is loaded with a 200 ohm carborundum resistor.  
That way, I can feed 5 to about 20 watts into it and get 100 out.  
This has the advantage of not needing an input tank, like a G-G  
circuit, but you do need bias and screen supplies.

My advice is that if you want G-G, then stick with triodes, or  
the tetrodes like the 4-400 family.

E-mail broehrig@admin.aurora.edu                      73 de Bob, K9EUI  
CIS: Data / Telecom    Aurora University, Aurora, IL

From boatanchors@theporch.com Thu Oct 24 08:06:25 1996  
From: "William B. Ross" <billross@txdirect.net>  
Subject: Re: 4-400Z (?) tube in Grounded-grid service  
Message-ID: <326F56EE.73C0@txdirect.net>

807s and 1625s were often used in lower powered amplifiers in the bygone  
days. There was even a method devised to separate the cathode of the  
1625 from its filament in order to eliminate the need for a filament  
choke.

Other tubes used for such service included 811s, 812s, 813ss and the  
list goes on. Just about any tube with good linearity specs (i.e. work  
well in audio service), rugged grids and screens and high plate  
dissipation are suitable for grounded grid service.

But even rugged screens and grids are not essential. Collins (bow three  
times toward Cedar Rapids) used the 4cx100a (with a 10 watt screen and a  
0 watt grid) in cathode driven (but commonly referred to erroneously as  
grounded grid) service.

Even the 833A had been used. Creativity is the name of amateur radio.

Bill K5LLK

From boatanchors@theporch.com Thu Oct 24 12:40:17 1996  
From: vancleef@netcom.com (Henry van Cleef)  
Subject: Re: 4-400Z (?) tube in Grounded-grid service  
Message-ID: <199610241506.JAA13626@netcom4.netcom.com>

As William B. Ross discourses

>

> But even rugged screens and grids are not essential. Collins (bow three  
> times toward Cedar Rapids) used the 4cx100a (with a 10 watt screen and a  
> 0 watt grid) in cathode driven (but commonly referred to erroneously as

> grounded grid) service.

>

A small but subtle point, which may help some in understanding texts on active device theory: looking at a three-element device (triode or transistor) in a circuit, and referring to one element as "grounded" is a standard theory device. "Ground" does not refer to "0 volts," but to "doesn't wiggle." One of the three active elements is always "grounded" in a circuit, and is the common point between input and output. The British are a bit clearer in their terminology as they differentiate between "earth" and "ground."

The standard amplifier found in radio receivers is a "grounded cathode" circuit. A typical 6SK7 IF has its cathode at +3 volts initial bias and a bypass across it to assure that no AC appears on the cathode. The capacitor's function is often referred to as assuring "AC ground."

The "grounded grid" circuit, where input is between grid and cathode, and output taken from the plate, with the grid at a fixed voltage, differs in that the input circuit has to power the output circuit, because cathode current is in the input loop. It is used as an isolation circuit, to make a low impedance input drive a high impedance output.

The "grounded plate" circuit is the familiar cathode follower. It is another converter circuit, going from high impedance input to low impedance output.

The equivalents in bipolar transistor circuits are:

grounded emitter=grounded cathode.

grounded base=grounded grid.

grounded collector=grounded plate.

I give those equivalences and terms because they were fundamental concepts I used when teaching tube engineers how to design with transistors in the sixties. The analogies work the other way, for those becoming familiar with tube circuits and having some understanding of circuit theory using transistors as the actives.

I mentioned triodes, because tetrodes and pentodes have other elements. These are almost always static elements, connected to "ground." A screen may be elevated to +100 volts, but that is almost always accompanied by a bypass cap to assure that it stays at 100 volts under AC conditions. It is "grounded to 100 volts." Modern texts often refer to circuits that operate between two ground points, which are the two voltages supplied by a power supply (15 and 0, +/-5V, etc.).

There are "gimmicks" in using these circuits, where the "grounded" element may see AC of some sort. One that should be familiar to all is the AA5 output circuit, typically a 50L6 in a grounded cathode circuit, but with 180 ohms in the cathode lead and no bypass cap across it. In this case, the cathode sees plenty of AC as a function of the input voltage, which is effectively negative feedback fed to the input circuit. In this case, an analysis of circuit transconductance has to include the conductances of both the tube and the cathode resistor, and anyone who wants to pursue this will soon see that the output current is primarily a function of the cathode resistor conductance, not the tube characteristics.

The ancients almost never referred to the characteristic impedance of circuit wiring, nor to the concept that one element is "grounded," in their texts. If you have a modern (i.e., 60's or later) EE education, you've heard these terms, and may wonder where they are when reading Terman, Seely, etc. When you hear about a cathode follower "driving cable capacitance," in the ancients' texts, you are hearing about a cathode follower driving a transmission line terminated in a high impedance. In audio work, even a 100 foot cable is short compared to the wavelength, but it is still a transmission line, and the cathode follower is doing impedance matching at the source.

I won't go into the vagaries of terminating a modern SCSI device cable, (double termination), but the concepts are equally applicable to old electronics.

From boatanchors@theporch.com Thu Oct 24 08:06:25 1996  
From: "JOHN A. KING (WA1ABI)" <JAK@SUD2.ED.RAY.COM>  
Subject: Re: 807,1625 in GG  
Message-ID: <01IB0HM4R4BM90N1DS@SUD2.ED.RAY.COM>

Brian Carling inquired:

> Guys I wonder if anyone has ever tried using tubes like 807, 1625,  
> 6L6 etc. in a grounded grid amplifier circuit?

Yep. In fact, it's a good bet that over the years every tube type has been tried in every configuration imaginable. For the 1625 story, see "The 1625 Tube" by WOREP in Electric Radio #83, June 1996.

73,

John King WA1ABI

From boatanchors@theporch.com Thu Oct 24 08:06:25 1996  
From: bkh@bwab.se  
Subject: Alexanderson Alternator  
Message-ID: <199610240633.IAA23478@mailbox.swip.net>

I'm sorry to read that the signals from SAQ was not readable according to reports on the latest BA digests. I received a report by Rick Ferranti that SAQ was heard in the Boston Area, see down below.

The transmission really took place, although it started a bit earlier than planned. The first part started 085233 UT with a message in English that later was repeated 4 times by different operators. The final SK came 090945 UT.

The message was as follows.

CQ DE SAQ CQ DE SAQ CQ DE SAQ.  
THE RADIO STATION GRIMETON IS NOW DECLARED A LISTED  
HISTORIC BUILDING BY THE COUNTY COUNCIL OF HALLAND,  
SWEDEN AND GOVERNOR BJOERN MOLIN.  
THIS MESSAGE IS TRANSMITTED BY A 200 KW ALTERNATOR,  
CONSTRUCTED AT GE BY ERNST ALEXANDERSON 80 YEARS  
AGO BY SM0AGP 73 TO THE RADIO CLUB OF AMERICA FROM  
SETH MYRBY + SK

Seth Myrby SM0AGP is head of the government agency for radio communications in Sweden.

The main part of the message was then repeated by 3 other operators SM6DM, SM5BF, the last one unknown.

I made a recording of the transmission although my QTH is 300 km (480 miles) south of Grimeton and the receiveing equipment not very suited for those frequencies. An old DRAKE LF-converter into a 51S-1 and part of a 80 mtr dipol made it possible to copy the sigs.

I have no means to digitize the tape but can send a copy to US for proper handling. The recording is made on a DAT recorder but I can make a copy on old good tape, MD or Cassette.

73 de Bengt Wilander SM7BKH bkh@bwab.se

>From Ferranti\_Rick@mac-mailserver.atc.ll.mit.edu Wed Oct 23 22:21:52 1996

>Date: 23 Oct 1996 16:20:29 -0400  
>From: "Ferranti Rick" <Ferranti\_Rick@mac-mailserver.atc.ll.mit.edu>  
>Subject: RE: Alexanderson Alternator  
>To: bkh@bwab.se  
>  
>Bengt:  
>  
>Just to give you a quick heads up; two out of four of us friends here in the  
>Boston area heard SAQ this morning. The two folks that did hear it have  
>already faxed the station a reception report; I was one of the unlucky ones  
>(who lives in a heavily populated and therefore noisy area), but you can't  
>fault me for not trying: in the two weeks since I heard about the test  
>transmission I homebrewed a LF converter, an highpass filter to reject  
>broadcast stations, and a 10" tuned ferrite loop antenna! The whole was  
>feeding a Ten-Tec Corsair II, with excellent filtering from 250 Hz to 2.4 KHz,  
>very low phase noise, notch and peak audio filters, passband tuning, and a  
>variable noise blanker. Sensitivity at 17.2 KHz was measured to be 0.1  
>microvolts. Oh well.  
>  
>I plan to fax the station a report anyway, as they may want to show their  
>financial supporters that there's a lot of interest in SAQ.  
>  
>Final question: was there a failure at about 0905 UTC? The two folks who  
>heard the station lost it after that time.  
>  
>Best regards,  
>  
>Rick Ferranti WA6NCX  
>Boston, Massachusetts  
>-----  
>  
>  
>

From boatanchors@theporch.com Thu Oct 24 08:06:25 1996  
From: Paul Bernhardt <bern@ppdu.nrl.navy.mil>  
Subject: AOR DDS-2A for Collins  
Message-ID: <Pine.A32.3.91.961023232827.17457A-100000@ppdu.nrl.navy.mil>

Collins KWM-2 and S-line collectors will want to read the October 1996  
issue of the British journal "Short Wave Magazine". The AOR DDS-2a  
(which was also described in the June 1996 Collins Journal) is evaluated  
in a four page article. The conclusion is that "for any one owning  
Collins equipment the DDS-2a is manna from heaven". Also to be noted is  
the DDS-2a costs \$100 less in the United States than in England.  
Paul Bernhardt, KF4FOR



From boatanchors@theporch.com Thu Oct 24 22:20:48 1996  
From: mknudsen@lucent.com  
Subject: Re: AOR DDS-2A for Collins  
Message-ID: <9610242102.AA04087@bock.ih.lucent.com>

Cudja please explain a bit more? I take it the DDS-2A is a digital audio processor. Why should Collins gear need this more than any other stuff, especially given that tunable notch filter in the 75A4, and I think some of the S-lines had it too.

Or maybe only Collins lovers can afford it :- ) 73, mike k aa9rg

From boatanchors@theporch.com Thu Oct 24 08:06:25 1996  
From: billo@nti.net (Bill Wilson)  
Subject: Black caps in SP-600  
Message-ID: <19961024011756891.AAA180@LOCALNAME>

Just a quick note about the set here. I have a SP-600 JX-6 (navy model) and took out some of the caps and took them down to the local vintage electronics shop (now closed). The caps were tested with one of those fancy cap checkers that actually tests them under HV. ALL of the examples had significant leakage which proves once again that they should be replaced if you plan to use the set. I have yet to replace the caps in the RF deck and IF transformers but will do that soon as I can.

Regards,

Bill  
AC4LC  
Jacksonville, Al.

From boatanchors@theporch.com Thu Oct 24 22:20:48 1996  
From: "Paul Bocci-CPB007" <Paul\_Bocci-CPB007@email.mot.com>  
Subject: Black Caps in SP600  
Message-ID: <Macintosh \*/PRMD=MOT/ADMD=MOT/C=US/@MHS>

There has been mention of black beauties under the chassis, in the IF cans and in the RF deck but no one has mentioned the "band strips" in the turret itself. The one I rebuilt had a few buried in there as well. Easy to get at by pulling the strip but easy to overlook.

73 es ZUT  
Paul, K9NO

cpb007@email.mot.com

From boatanchors@theporch.com Thu Oct 24 08:06:25 1996  
From: Sandra L Knepper <slkst29+@pitt.edu>  
Subject: Re: Bristol splines- again!  
Message-ID: <Pine.GS0.3.95L.961024070909.11976A-100000@unixs3.cis.pitt.edu>

For those contemplating buying bristol wrenches to perform maintenance on their Collins, let me hasten to add that the short L-type sets are not satisfactory. The long extension Xcelite 11 piece set that is carried by Jensen Tool Company in Phoenix or distributed by Cooper Tools, Inc. is the preferred tool. The manufacturers part number is Xcelite number designation 99PS60. Although the cost of just under \$40 dollars may seem pricey, I know from experience both in the Air Force working on Collins and in my shop that I could not do without them when working on Collins especially the 51J series. In my opinion, working on Collins, the finest amateur radio equipment ever made, deserves the best tools a technician can afford. Please do not accept cheaper substitutes.

Thank you.

Dave, W3BJZ  
Publisher of the monthly Collins Journal

From boatanchors@theporch.com Thu Oct 24 12:40:17 1996  
From: Bill Sorsby <bill.sorsby@dlep1.itg.ti.com>  
Subject: Re: Bristol splines- again!  
Message-ID: <199610241636.LAA10461@lesol1.dseg.ti.com>

At 06:25 AM 10/24/96 -0500, Dave Knepper wrote:  
>For those contemplating buying bristol wrenches to perform maintenance on  
>their Collins, let me hasten to add that the short L-type sets are not  
>satisfactory.

Dave, I agree with you that a short arm set is not adequate, but wish to point out that the two sets of L-type wrenches I bought from McMaster-Carr (one short arm set with the smaller sizes and one long-arm set with the larger sizes) have come in very handy. I've not yet encountered an instance when another type wrench would have worked better or been more convenient.

I realize that for most of you Collins' collectors, money is no object.  
<grin> Nevertheless, just in case money is a consideration for anybody on the list, I wanted to point out that there are more economical tools available which work just fine.

Regards,  
Bill Sorsby, N5BU

\*\*\*\*\*  
bill.sorsby@dlep1.itg.ti.com  
Views expressed herein are no one's fault but mine.  
\*\*\*\*\*

From boatanchors@theporch.com Thu Oct 24 22:20:48 1996  
From: wd4mgm@ix.netcom.com (CARL WHITAKER )  
Subject: Re: Bristol splines- again!  
Message-ID: <199610242023.NAA26167@dfw-ix12.ix.netcom.com>

>>For those contemplating buying bristol wrenches to perform  
>>maintenance on their Collins, let me hasten to add that the short  
>>L-type sets are not satisfactory.

They may not be "satisfactory",..but sometimes necessary! There are a few choice places where only the short L-type will work. It is also very easy to over-torque things with the Xcelite handle....while at the same time it works well to "break" things loose.

Speaking of stubborn setscrews, there were several posts which addressed this problem a while back with some good ideas. I don't recall seeing one that has worked well for me, especially on setscrews that still have the factory (Collins) green thread lock stuff present. I hold the point of a pencil point soldering iron in or on the setscrew for several minutes before applying the muscle. This really seems to make a difference.

Carl Whitaker  
WD4MGM

wd4mgm@ix.netcom.com

From boatanchors@theporch.com Thu Oct 24 22:20:48 1996  
From: drhydro@ames.net (Paul Nelson)  
Subject: Re: Bristol splines- again!  
Message-ID: <v01540a02ae959deaddfb@[1.1.1.1]>

>For those contemplating buying bristol wrenches to perform maintenance on  
>their Collins, let me hasten to add that the short L-type sets are not  
>satisfactory.

>

>Dave, W3BJZ

>Publisher of the monthly Collins Journal

Dave, I don't disagree that working on Collins stuff deserves the best tools that one can afford... but I do disagree with your statement that the short L-type sets are 'not satisfactory'. I feel that in many cases they are in fact better than the long Xcelite type, and here's why: When I encounter a setscrew that's stubborn, stuck, corroded, or otherwise requires an inordinate amount of torque be applied (close to what might strip the splines or exceed the yield of the wrench,) I \*much\* prefer using the short arm because I can feel what's going on with the darn thing! The long Xcelite tool (and even the long side of the short arm wrench) winds up like a rubber band- and if something \*does\* yield, the business end of the thing will spring back to its rest position- a significant portion of a full turn- destroying what yielded without giving you a chance to 'let off' the pressure. Besides that, the more I use my own full set of Xcelite tools, the more wear I put on 'em- and the more likely such an occurrence becomes. I'm much more likely to start the process with one of the short arms and then switch to the Xcelite when I have it just loose and then have to spin it the rest of the way out.

My opinions here are me own- but I've seen 'em proven, too, in production applications where we use Apex and other hex and spline drivers on the ends of electric torque-and-angle controlled nutrunners costing fifteen grand per spindle- the longer the bit has to be, the less control over it you have!

I'd be interested in your thoughts on the above.

Paul Nelson W5GNF  
Ames, Iowa

"When I go, I want to go quietly, in my  
sleep, like my grandfather- not  
screaming, like his passengers."

(DrHydro@ames.net)

Cessna 140 N77149

"More hay, Trigger?"

"No thanks, Roy, I'm stuffed."

From boatanchors@theporch.com Thu Oct 24 08:06:25 1996

From: "Allan Fritsche" <fritsche@msn.com>

Subject: Buffing Bakelite Knobs

Message-ID: <UPMAIL03.199610240127380490@msn.com>

Gang, just read Merv's post about buffing bakelite knobs. Sounds good but be very careful cause you can burn anything on a buffer, at least knob wise. As always patience should be your guide.

BTW, what the Hell is bakelite(Spelling). Some sort of composite layered whatever? (Barry or Hank) this is your que.

Your Friend Al  
fritsche@msn.com

From boatanchors@theporch.com Thu Oct 24 22:20:48 1996  
From: "Barry L. Ornitz" <u856010@eastman.com>  
Subject: Cadmium Toxicity  
Message-ID: <Pine.ULT.3.91.961024191605.26857G-100000@dua150.kpt.emn.com>

Mike Knudsen, AA9RG, wrote:

> Barry, while on the topic (someone mentioned chromate powder),  
> how about cadmium plated chassis? Most old radios were Cd plated,  
> and one book warns that this stuff is toxic. Many old chassis  
> have this yellowish powder coating from years of corrosion,  
> which is easily brushed and wiped off. Is this stuff dangerous?  
> I try to do this work outdoors, but I've surely inhaled plenty of  
> this dust and got it on my hands.

Cadmium is very toxic but the metallic form, as a corrosion resistant plating on a chassis, is not too bad to work with. Probably the worst thing that can be said about cadmium is that its effects are highly cumulative. Cadmium induced kidney damage is irreversible and may progress after exposure ceases. Cadmium is also a suspected human carcinogen. The lowest published human toxic concentration was 88 ug/m3 inhalation for 8.6 years, and the lowest published human lethal concentration was 39 mg/m3 inhalation for 20 minutes. Fortunately in its metallic form, cadmium metal causes only skin irritation when contacted. A thorough washing is all that is required after contact. Ingestion or inhalation of the dust is an entirely different matter. The amount of cadmium metal plated onto a chassis is small too and usually not nearly as thick as zinc plating.

Cadmium oxide, a yellowish brown dust, has similar toxicity properties. Again skin contact only requires a thorough washing, but ingestion or inhalation can be fatal. The oxide is especially toxic to the kidneys. Concentrations of dusts responsible for fatalities have been 5 mg/m3 for 8 hours, 9 mg/m3 for five hours and 40 to 50 mg/m3 for one hour. Occupational exposure to cadmium is implicated in a significant increase in the incidence of prostate and respiratory tract cancers. One study also reported a significant increase in kidney and urinary system cancers. Human exposure to cadmium fumes has been associated with testicular toxicity, altered libido, and infertility.

So Mike's suggestion about working outdoors is a good one. If you sandpaper a cadmium plated chassis, it might be a good idea to wear a

dust mask. Ben Hall added:

> We cad plated a lot of stuff made before the 80's, but switched to  
> chrome plating as I was told this was "because the plating solution  
> was less toxic."

I have not had time to check the actual numbers but chromium is pretty toxic too. Just a little chromium plating waste getting into a sanitary sewer system can kill all the bacteria in a treatment facility.

> I remember cad plating not being a problem as long as you don't heat it,  
> breath it, and/or eat it, and in the metallic form (like a plating) it  
> really isn't that bad, but I do remember it being able to pass through  
> skin.

This is generally very good advice. The oxide and metal are not likely to pass easily through the skin, but plating solutions are another matter.

> Perhaps gloves are in order? Personally, I'm not real worried. Not sure  
> what the yellow gunk is... Ohhhh Barrryyy, weeee neeeeed yooooouuu... It  
> does require disposal in a special landfill I do remember.

If I never write another thing for this list, I hope to get across that a good pair of chemically resistant gloves are one of the best investments a restorer can make. They are not very expensive either, and they will really decrease the risk of exposure to many nasty things. The quantities of cadmium waste we generate from restoring an old chassis are hardly enough to require disposal permits. It is still wise to bag up any dusty rags, sandpaper, etc. and seal them before throwing them in the trash.

And Ben, remember that I get Boatanchors via the digests so my responses may be delayed a day or two.

Mike finally ended his original note with the following comment:

> Sooooo, should I start making up a list of asking prices for my widow, or  
> just be more careful in the future?

I do not know how to answer this one, Mike, especially when you mention prices in plural. Do you plan to part her out before hand? Or do you follow Larry Ware's policy of charging the deserving somewhat less and have several prices? I would say you need to be careful when cleaning up old equipment - and definately be very careful to not let your wife read the list for a few days or so! :-)

From boatanchors@theporch.com Thu Oct 24 08:06:25 1996  
From: "Douglas R. Wiese" <wiese@MR.Net>  
Subject: Re: Differences between 7543 and 6AU6?  
Message-ID: <199610240431.XAA22652@riverside.mr.net>

Many years ago I worked for a manufacturer and part of my duties included the repair of some proprietary amplifiers used in a quality checking application. We were using these as part of a system to amplify output of a silicon solar cell. The amps were conventional class A amplifiers. The first tube in the chain was a 7543 so I had occasion to check a lot of these though the years using the classic Hickock maroon transconductance tester, don't know for sure anymore which model, but the tube chart data should hold for all of that genre. While I don't remember the exact value on the chart lets call it 1800 micromhos for a starting point. Empirically testing 100's of these through a 15 year period I found that the 7543 was always 2000 minimum (again the 1800 is a starting point and the settings were identical). Compared to a 6AU6, the best of those hit that same value, although many weren't that good, especially after the "end" of the vacuum tube era in the late 70's - early 80's the 6AU6's seemed to have trouble hitting the 1800 mark- used ones were often better ! The storeroom couldn't come up with a source of supply on the 7543's at that time so I hand selected the "best" 6AU6's with good results for use in that first tube position. I believe the only ones I ever saw were Sylvanias, but that doesn't mean others weren't out there. At the time I had an HW-101 and there was an "improvement" mod sheet for sale about the 6HS6's in the IF amps being too "hot" for the application and prone to "burnout", and to replace them with 6AU6's. My 6HS6's (Elmenco) looked to be a little gassy (not uncommon for these I've read) so I replaced them with 7543's, with good results. As I remember when I was checking 6HS6's they were similar in transconductance to the 7543's. As far as being hard to obtain I got a new Antique Electronics catalog in today's mail and I believe they are in there for \$3.40, not a "rare" price although you would have to call them on availability.

73 Doug Wiese - WB0YDD email wiese@mr.net

-----  
> From: Stuart Renes <stuartr@saturn.dsccc.com>  
>  
> I notice that Collins uses a 7543 in their KWM-2/A gear. It appears that this  
> tube is rather hard to come by. It seems electrically identical to a  
>  
> Does anyone know the details of this selection or the penalty for substituting a  
> 6AU6 for the 7543 in a KWM-2/A?

From boatanchors@theporch.com Thu Oct 24 22:20:48 1996

From: Richard Hager <rhager@millcomm.com>

Subject: Drill bits, the final chapter!!

Message-ID: <32701E5B.6789@millcomm.com>

Barry L. Ornitz wrote:

>

> I really do not want to go against someone whose signature file says he  
> works for a CNC machining company on what is or is not a cobalt drill bit.

Aw heck, what's a little correction between fellow boaters, right? I think the root of the disagreement may be simply semantics anyway. By the way, we are not a CNC machining company. We make the CNC controls themselves for such shops (and for home shops as well). We have an in-house model shop for prototyping.

I agree with Barry that this discussion has probably gone far enough, as far as BA list distribution is concerned. I also agree with him that good tools are essential, and I hate to see people throw money away on junk. So I will close it here, with these notes:

a) As I mentioned, HSS comes in a hundred different grades. Varying the cobalt content is one of the main ways they produce different cost/performance grades. What I was trying to say was that the high-cobalt alloys are -included- in the family of 'high speed steels'. But I said they 'were the same', which was poor phrasing. There are plenty of HSS alloys with cobalt, and plenty without it.

b) My main point in the earlier post was simply that you -don't- want to buy carbon-steel bits. Either the HSS or the high-cobalt HSS will do an excellent job for general shop purposes. The addition of cobalt increases the 'red heat toughness' as Barry said, but does not significantly help the bits ability to penetrate hard materials. The hardness values for HSS with and without cobalt are very similar.

c) Barry mentioned that the cobalt tools were sold as being 'appropriate for cutting tougher, harder steels'. That may be true, but I think you will be sorely disappointed if you attempt to cut fully-hardened steel with a steel bit. I highly recommend you use carbide...

d) Finally, rather than address Barry's post point by point, I will simply repeat my earlier recommendation: Get an MSC catalog or similar, and buy your tools there, not at the hardware store.

The tools down at the hardware store are mostly junk; the vast majority are of carbon steel or very low grade alloy. If they're not mis-ground to begin with, they will certainly be dull as a doorknob after the first couple holes. And again, I would not go by color when purchasing tools. There's too many different



coatings being made these days to be sure what you are getting simply by 'looks'.

The MSC cat is free and there are 2,000 pages of tools. Practically every alloy bit is available in all different point angles, shank lengths, and other variations you've never even dreamed of.

Barry and I seem to miss each other's points sometimes, but my main point earlier was simply to warn people against buying cutting tools at the hardware store, and to let them know that -any- HSS tool is vastly better than carbon steel, whether it's a high-cobalt grade of HSS or not.

PS to Barry: I think you were the one that asked whether taps/dies are available in cobalt grades. Answer is yes, and carbide too! Check MSC or Travers Tool, etc..

> [ Back in the "good ol' days" it was not unusual to see a 316L stainless  
> trailer hitch go home in a lunchbox.]

Hey Barry, I need to talk to you about getting one of those for our jeep....

Richard  
--

Richard Hager

+ Ah-ha! Design Group, Inc. -  
+ Precision CNC Technology, since 1991 -  
+ 612-641-1797, Fax: 612-641-8681 -  
+ "I just like to build stuff" So... -  
+ for CNC info, don't email me, call -  
+ or email Ah-ha! directly. Thanks! -  
+ www.gdic.com/ahha email: ahha@gdic.com -

From boatanchors@theporch.com Thu Oct 24 08:06:25 1996  
From: Richard Hager <rhager@millcomm.com>  
Subject: Re: Drilling out setscrews  
Message-ID: <326EC57E.4DBB@millcomm.com>

Barry L. Ornitz wrote:

> Setscrews are normally hardened steel and a regular drill bit will likely  
> not cut through one. The titanium nitride coated bits will do a little  
> better but not much. I cannot understand why these have even become so  
> popular. To really do the job, get cobalt bits.

Hello fellow anchor-crankers...

"Cobalt" bits are the same as HSS (high speed steel) which I mentioned in my previous post. There -are- various grades (about a hundred!). If you buy US made 'cobalt' or HSS bits, you are very likely to get a good bit. For reference, a complete 120pc drill index in good quality cobalt HSS costs around \$200. It's well worth it! If you're getting such a set for \$39, it is NOT cobalt HSS!

You would not 'choose' between Titanium Nitride (TiN) versus Cobalt/HSS. Cobalt steel is an alloy, whereas TiN is a hard and lubricative coating that is used on all base metals including cobalt/HSS. It tends to prevent pressure-welding of the metal chips on the flutes, and it increases cutting edge life significantly. At work, we use almost exclusively TiN-coated cobalt/hss tooling, with some carbide thrown in for flavor...

Carbide bits are the only thing that will drill fully-hardened steel, although I think setscrews are only 'half-hard'. However, carbide chips very easily, especially in 'interrupted cuts', which drilling the top of an allen-head with a hand drill probably qualifies as! If at all possible, fixture the work on a drill press or a mill to do this job.

A good place to shop for tools is MSC. They have an amazing 2,000 pg catalog, it's free, and you can reach 'em at: 800-645-7270. They have monthly sale catalogs, and I once saw such a drill index at about half price, \$110 or so, Chicago-Latrobe steel I think. They are also known in rec.crafts.metalworking for excellent service. I'm pretty sure they also have those Torx or Bristol bits that I've seen mentioned here recently. They have the full line of Bondhus stuff anyway...

> To really do the job, get cobalt bits. These are the solid-gold colored >  
> bits with a point that is ground at a slightly different angle; the  
> titanium nitride bits are only coated down the length of the flutes.

All the plain cobalt/hss tools we buy at work are regular steel color. All the TiN coated tools we buy are gold colored, regardless of the underlying alloy. There is no reason a maker couldn't coat an entire cheap carbon steel bit with TiN. So don't go by length of coating, go by definite words like "cobalt high speed steel" or 'HSS' on the package. Also, the point angle doesn't signify anything about the tool's alloy. All alloys are available in all different point angles and types.

Thanks to Barry for bringing this up. For me, half the fun is in the mechanical and fabrication side of things. Any homebrewer who hasn't added a Sherline micro-mill or similar to his shop is really missing something!

I love machining a resonant cavity on the mill, then hooking it to an old beast of a sampling scope and seeing it actually work. What good fun!

Richard

--

Richard Hager

+ Ah-ha! Design Group, Inc. -  
+ Precision CNC Technology, since 1991 -  
+ 612-641-1797, Fax: 612-641-8681 -  
+ "I just like to build stuff" So... -  
+ for CNC info, don't email me, call -  
+ or email Ah-ha! directly. Thanks! -  
+ www.gdic.com/ahha email: ahha@gdic.com -

From boatanchors@theporch.com Thu Oct 24 12:40:17 1996  
From: "Bob Ragain, 303-470-2534, RAGAIN@SEDALIA.OMNES.SLB.COM"  
<RAGAIN@hubvx6.sedalia.wireline.slb.com>  
Subject: Drilling out setscrews  
Message-ID: <961024085240.25058554@hubvx6.sedalia.wireline.slb.com>

A quick comment on the thread about removing stuck set screws: Use a left-handed drill bit. No I'm not joking. I can even get them at a great little hardware store up the road. As drilling proceeds and the vibrations and rotary impact hopefully loosen the screw, it will tend to back out, not get tighter.

Bob

-----  
Bob Ragain WB4ETT Littleton, CO

From boatanchors@theporch.com Thu Oct 24 22:20:48 1996  
From: "R. Eric Sluder" <sludere@gte.net>  
Subject: DX-20 manual - thanks  
Message-ID: <326FEADB.7092@gte.net>

I've been overwhelmed with requests to send me copies of a manual. I've accepted the first offer and appreciate the rest of you replying in such a timely manner.

I just joined this list, and it's comforting to know there are so many helpful (and kind) people out there.

73,

Eric Sluder, KB9BGS

From boatanchors@theporch.com Thu Oct 24 22:20:48 1996  
From: "R. Eric Sluder" <sludere@gte.net>  
Subject: DX-20 Manual : Thanks  
Message-ID: <327041E4.1EA4@gte.net>

Thanks to all who replied. I took the first offer and look forward to a copy arriving soon.

I just joined this list, and really appreciate the immediate replys.

(If this is the second "thank you" message...sorry, I never saw the first one get posted)

73,

Eric Sluder, KB9BGS

From boatanchors@theporch.com Thu Oct 24 22:20:48 1996  
From: Eugene Rippen <soundval@foothill.net>  
Subject: FS GALAXY  
Message-ID: <327023D2.4C7E@foothill.net>

The following GALAXY gear is for sale. None have been tested.  
The descriptions ("G:", "F" ect) relate to outward appearance only.  
Unless stated otherwise, they look complete and unmodified to me.

GALAXY III,	F-G	\$55
GALAXY V Mk3,	F	\$55
GALAXY V Mk2,	F-G	\$60
GALAXY Sound Processor,	Ser # 6009AA1009, G	\$15
GALAXY "	" , Ser # 5004AA384, VG	\$20
GALAXY RF-2 Special VFO	G-VG	\$40

Add shipping.

Eugene Rippen  
105 Donnington  
Auburn, CA 95603          No Phone Calls Please.

From boatanchors@theporch.com Thu Oct 24 08:06:25 1996  
From: Eugene Rippen <soundval@foothill.net>  
Subject: FS National

Message-ID: <326EF9FE.27EB@foothill.net>

The following NATIONAL gear is for sale. Untested unless stated otherwise.

The Descriptions ("F", "G" etc) relate to outward appearance only. Unless stated otherwise they appear to be complete and unmodified.

NATIONAL

NCX3	G	\$85.00
NCX3	G	\$85.00
NCX5	G	\$150.00
NC109	G	\$75.00

Add shipping

Eugene Rippen  
105 Donnington  
Auburn, CA 95603      No Phone Calls Please

From boatanchors@theporch.com Thu Oct 24 22:20:48 1996  
From: Richard Post <POST@ouvaxa.cats.ohiou.edu>  
Subject: FS or trade, Heath DX-20 meter  
Message-ID: <A4166ZWNTOMS9R\*/R=OUVAXA/R=A1/U=POST/@MHS>

A few days ago, someone posted a request for a meter for a Heath AT-1. Don't know if this is the same meter. It is identical to the one on my \*DX-20. It moves properly when connected to my VOM ohmmeter but it is sensitive to magnets. I can tell where it has been opened in the past by the previous owner and closed again. Looking at it from the glass side, I can see that it has a stationary coil and the needle itself has what appears to be a magnet attached. This is apparently how these meters were made. If you get this one, adjust the zero position after it is in place. Or explain to me why this thing thinks it's a compass.

Open to silly offers on this meter, especially if you need it to complete a Heath project. Will trade it for a 4-400 socket so I can turn the tube into a "glowing example".

\*A picture of the DX-20 with meter is on the web site.  
<http://ouvaxa.cats.ohiou.edu/~post/PIX/BA.HTML>

There is a link to the Heath Virtual Museum catalog picture for the DX-20. The Heath Virtual Museum has a catalog pic of the AT-1 but I cannot tell if the meters are the same.

73, Rich KB8TAD      <rpost1@ohiou.edu>

From boatanchors@theporch.com Thu Oct 24 22:20:48 1996  
From: Eugene Rippen <soundval@foothill.net>  
Subject: FS SWR/POW ER Meteres  
Message-ID: <326FB8F5.913@foothill.net>

The following SWR and POWER METERS are for sale.  
The description ("G", "F" etc) refer to outward appearance only.

M.C. JONES 263.3 Micro Match SWR/Power, with remote coupler. 10/100/1000 Watts.	G	\$50.00
VANCO SWR-4.	G	\$10.00
KRISS 823-136. 50/100 Watts. In Box.		
Instructions	VG	\$20.00
THOROTEST RF-2. 3 - 55 MHz. Power Meter		
10/100 Watts.	G	\$20.00
COMMTRON 8050 SWR/Field Strength Meter		
in Box	G	\$20.00
MFJ 812 VHF SWR/Wattmeter/Field Strength		
Meter. 300 Watts.	G	\$25.00
LYKES/HEATH Co. SWFS-5	G	\$15.00
CONTINENTAL ELECTRONICS 7 SOUND		
"Citizens' Transicheck"	G	\$10.00

Add Shipping.

Eugene Rippen  
105 Donnington  
Auburn, CA 95603 No Phone Calls Please

From boatanchors@theporch.com Thu Oct 24 12:40:17 1996  
From: Laird\_Tom\_N@hpmail1.90.deere.com  
Subject: FS: Eico 320 signal gen.  
Message-ID: <H00005a0040d41b4@MHS>

I just purchased some old equipment from an ole timer in Denver, IOWA.  
A couple items I don't need:

Eico model 320 signal generator.....\$15  
RCA senior Volttohmyst.....\$30

The RCA works well, but no manual, the Eico works at 103.7 MC, but had trouble finding 455kc on the dial. No manual for the Eico either.  
Shipping will be added.

Will do trading for a Heath IT-28 Cap. checker or a HP or Boonton AC/RF

millivolt meter.

Tom Laird WC9M Moline, IL  
TL39597@deere.com

From boatanchors@theporch.com Thu Oct 24 08:06:25 1996  
From: k7yha@juno.com (Richard H. Arland)  
Subject: HW-101 Problems - HELP!!  
Message-ID: <19961024.015941.4407.4.k7yha@juno.com>

Gang:

I give up!

I have been working on this LSB/USB power disparity for a week now and am no closer to solving the problem.

Here's the situation: The HW-101 has more power output (almost double) on USB than on LSB.

I have completely realigned the rig at least 4 times that I can remember.

I did find a bad FET in the VFO that (along with a trimmer cap and diode) shifted the VFO freq when changing between USB and LSB.

I have tweaked, peaked and retweaked the transformer T-1 (that feeds the signal from the balanced modulator into the input of the isolation amplifier who's output feeds the crystal filter) and cannot get the LSB power to come in line with the USB power.

I am starting to believe that I have a bad xtal filter. I do have an extra one (from the SB-101 that I am hoping to get working before the contest this weekend) and I don't want to swap the filters out unless absolutely necessary.

Anybody got any ideas? This one is a real "hanger queen"

73 rich K7YHA

From boatanchors@theporch.com Thu Oct 24 22:20:48 1996  
From: Chris Sieg <c\_sieg@conknet.com>  
Subject: RE: HW-101 Problems - HELP!!  
Message-ID: <Chameleon.4.01.2.961024214557.c\_sieg@PIEXX.conknet.com>

Hi Richard,

I have had quite a few HW-101's, and their cousins, come through my shop with low output. A common cause of this problem is low output from the carrier oscillator. The oscillator is made up of two sections of a 12AU7 dual triode. One 12AU7 section is for upper sideband injection, the other section is used for CW and lower sideband injection. The appropriate oscillator is chosen by applying B+, through a 33K resistor, to the plate of a given section of the 12AU7 via the mode selector switch (and the TR relay when in the CW mode). The weak link in this circuit is the 33K ohm plate resistor. Heath included a 1/2 watt unit with the kit and I have found that they don't hold up over time. Check the voltage at the plate of each section of the 12AU7, you should see ~120 VDC on the selected oscillator. I usually replace these 33K resistors with 1 watt types.

Hope this helps,  
-Chris

-----  
Name: Chris Sieg WA3LDI  
E-mail: c\_sieg@mail.conknet.com (Chris Sieg)  
URL <http://www.conknet.com/piexx>  
From boatanchors@theporch.com Thu Oct 24 08:06:25 1996  
From: k7yha@juno.com (Richard H. Arland)  
Subject: Re: Knobs  
Message-ID: <19961024.002044.4407.1.k7yha@juno.com>

Gang:

Roger, N3PBL, my chief scout, cabinet restorer and knob polisher, takes bakelite knobs and washes them in soap and water first, followed by a 409/Simple Green-kind-of-general-purpose-detergent, and allows them to dry overnight.

The next day he takes each knob and rubs them with a scouring powder made from toothpaste and baking soda (1/2 and 1/2) ((I think Bon-Ami would work just as well and a lot less hassle)). These knobs are again washed in soap and water and allowed to dry.

The white/red lines are removed by scraping the surface with sewing needle, the end where the thread goes, not the sharp pointy end.

Finally, he uses some Finish 2000 car paste wax (formulated for acrylic car finishes) and adds the white/red lines and/or dots with a toothpick and acrylic paint.



My Hammer 170AC knobs look like new.

73 rich K7YHA

From boatanchors@theporch.com Thu Oct 24 12:40:17 1996  
From: "Lynn D. Stolz" <lynn@midohio.net>  
Subject: Mil. Test Gear FS  
Message-ID: <326FABF9.2651@midohio.net>

I have the following items for sale. They are all in 100% working condition and good cosmetically. The reason for selling is they are surplus to my needs.

AN/PRM-10 Grid-dip oscillator, 2-400 Mc. with built-in audio oscillator. It includes a Fair Radio manual copy. I'll ship CONUS for \$65.

ME-26/D VTVM, DC-700 Mc. Militarized version of the HP 410-B with the 2-01C in the RF probe. This includes a gen-u-ine TM with it. I'll ship this CONUS for \$35.

I also have spare tubes for both items that may be negotiated for by the buyer.

Reach me at [lynn@midohio.net](mailto:lynn@midohio.net).

Lynn - N8AJ

From boatanchors@theporch.com Thu Oct 24 12:40:17 1996  
From: Laird\_Tom\_N@hpmail1.90.deere.com  
Subject: Mil. Test Gear FS  
Message-ID: <H00005a0040e1275@MHS>

Lynn.... I'll take the ME-26/D.

Tom Laird WC9M Moline, IL  
[TL39597@deere.com](mailto:TL39597@deere.com)

From boatanchors@theporch.com Thu Oct 24 12:40:17 1996  
From: Bob Roehrig <[broehrig@admin.aurora.edu](mailto:broehrig@admin.aurora.edu)>  
Subject: Misc F.S.  
Message-ID: <Pine.ULT.3.95.961024112200.23129B-100000@admin.aurora.edu>

Have the following for sale or trade: Each item \$ plus shipping.

- 1) DuKane 1U550 audio amp. Intended for music distribution/intercom use. Has selector for 3 mic inputs and 2 aux inputs, tone, volume, monitor level (for built-in speaker), Lever switch says: PROG/ALL/TALK/LISTEN. Has a row of 16, 4-position lever switches for selecting remote spkrs. Rack mount, 10 1/2 inches high. Output is push-pull 6L6/5881's. Would make great modulator or amp to monitor all those BA's. I'd rate this a 10, except for some dust. \$25.00
- 2) Collins 51M-8 rack mount aircraft VHF receiver (with manual). Has some xtals in it. Mechanical filter in IF. Spiffy looking and works. \$25.00
- 3) Gertsch FM-3 heterodyne freq meter. Kinda like a BC-221 but much better built and direct readout. Base freq 20-40 MHz with expansion to 1 GHz with built-in solid-state multiplier chain. Also include divider box to use this as generator down to 160 meters. Internal "hi-band" multiplier retuned from 150-170MHz to 140-160 MHz for 2 meter use. works well. Great stable sig gen. \$50.00

E-mail broehrig@admin.aurora.edu                      73 de Bob, K9EUI  
CIS: Data / Telecom    Aurora University, Aurora, IL

From boatanchors@theporch.com Thu Oct 24 12:40:17 1996  
From: "Douglas M. Gordon" <dmgordon@electriciti.com>  
Subject: Mod Xfrmr/info Need  
Message-ID: <1.5.4.16.19961024095515.1af7a1fe@electriciti.com>

Hello Xfrmr Gurus,

Need physical and electrical info on following:

Stancor A-3898  
UTC VM-4

Also would like to buy a multimatch xfrmr rated 175-250 watts with sec current rating approx 250-300 ma. Help please! Thank you for reading.

73,

Doug K6PUN  
Carlsbad, CA

From boatanchors@theporch.com Thu Oct 24 22:20:48 1996  
From: "Ray L. Mote" <rmote@rain.org>  
Subject: Re: Mod Xfirm/info Need  
Message-ID: <Pine.SUN.3.95.961024131313.13391D-100000@coyote.rain.org>

You wanted specs on the A-3898 transformer.

"Poly-Pedance" Modulation Transformer  
300W max audio power, 260 mA DC per side of primary winding. 260 mA (series) or 520 mA (parallel) on secondary winding. 7 5/8" high, 7 1/8" wide, 8 3/4" deep. Shipping weight 40 pounds. Went for \$98 in 1943.

Sorry 'bout the UTC -- no info. Been looking for their catalogs for some time with no luck.

73.....Ray Mote, K5FKT <rmote@rain.org> Oxnard, CA ex-W6RIC

From boatanchors@theporch.com Thu Oct 24 12:40:17 1996  
From: Merv Schweigert <k9fd@htc.net>  
Subject: Need Capacitor  
Message-ID: <9610241405.AA31549@ns.htc.net>

Hello BA'ers I am in need of a couple of junk electrolytic capacitors for a restoration project. They are Sprague 600 line type. But any similiar type will work. Dimensions are as follow  
1 3/8 dia , 4 3/8 tall, with single hole mount, the mount is a large threaded and secured with a nut, vintage 1935 or so. Any thing in the approximate size will work. Do not need good ones just for looks only and have made new labels for them in the color ink jet. Let me know if any in the junk box ??

Thanks 73 Merv

//////\\  
(# #)

-----o00-( )-00o-----  
:  
: Merv Schweigert K9FD Collector of Keys, "Bugs", :  
: 9694 S. Prairie Road Paddles, Code related gear :  
: Red Bud IL 62278 Crystals and Old Heathkits :  
: E-Mail k9fd@htc.net Always looking please call :  
: Ph. 618-282-3953 -----73-----:

-----  
From boatanchors@theporch.com Thu Oct 24 12:40:17 1996  
From: Rodger Singley <rbsingl@rs6000.cmp.ilstu.edu>  
Subject: Need manual/schem RA0-3 or NC100XA  
Message-ID: <9610241613.AA94274@rs6000.cmp.ilstu.edu>

If anyone has documentation on an RA0-3 (in this case, a Wells Gardner model) I would be happy to purchase a copy thereof. Otherwise, the 100XA documentation will probably be close enough.

Thanks,

Rodger WQ9E

rbsingl@rs6000.cmp.ilstu.edu

From boatanchors@theporch.com Thu Oct 24 12:40:17 1996  
From: Laird\_Tom\_N@hpmail1.90.deere.com  
Subject: Need X-former ID  
Message-ID: <H00005a0040d84c8@MHS>

I needs specs on two Thordarson transformers:

1) # 6423

2) # 6699

I think they are modulation transformers and mainly interested in wattage and impedance specs.

Tom Laird WC9M Moline, IL  
TL39597@deere.com

From boatanchors@theporch.com Thu Oct 24 22:20:48 1996  
From: "Ray L. Mote" <rmote@rain.org>  
Subject: Re: Need X-former ID  
Message-ID: <Pine.SUN.3.95.961024125821.13391C-100000@coyote.rain.org>

You wanted specs on Thordarson "#6423" and "#6699". In all the

Thordarson catalogs I have (one back to 1937!), they \*all\* have alphanumeric designators (T-64M25, etc.).

T-64M23: Modulation xfmr

Used with pair of 2-800 tubes in Class B, Primary 12.5K, Secondary 5K ohms. 200 mA max secondary DC current, 150W audio power. Table also indicates when used with pair of RK-18 in Class B, secondary 20K ohms, 100 mA max. (Wish they hadn't left primary Z and power output blank! Assume same values?) Metal box with flanges on bottom, looks like ceramic insulators in a row sticking out the side (above the mount flange) near the top. 6.25H x 5 7/8W x 8D. 20.5 pounds.

T-66M99: Modulation xfmr

Used with 4-46 or 59 in Class B, 2.9K primary, 500 ohm and 3.5K ohm secondary(s?) 215 mA DC in secondary maximum, 150W max audio power. Also shows use with 4-250 in Class AB, primary column blank, secondary column shows 6250 ohms, and DC current/audio output columns are blank. Styling same as T-64M23. 6.25H x 5 7/8W x 8D. 19.75 pounds.

Wonder if what they're doing is showing multi-tap transformers, not different impedance values for different tubes here? Beginning to look like it. <grin>

73.....Ray Mote, K5FKT <rmote@rain.org> Oxnard, CA ex-W6RIC

From boatanchors@theporch.com Thu Oct 24 12:40:17 1996  
From: Peter Ferrand <petef@sprynet.com>  
Subject: Ol' Buzzards  
Message-ID: <2.2.32.19961024152240.006de66c@m3.sprynet.com>

I'm very glad this subject came up because it brings to light the biggest single impediment to my enjoyment of AM ham operations. I won't say old radios in general since the subject conversations are never cw and don't affect use of receivers, and so forth.

Now, it's not the 15 minutes of chatter that bothers me, it's the lengthy roundtables they create that do.

I like to talk and listen as much as anyone, possibly more so since I do it for a living. BUT, what we're doing in these roundtables is not really having a very satisfying conversation, at least not to me. If there are several people in a group, the dynamics is such that in most cases the group will not be talking about a single subject, and it's impossible to say something of interest to the assembled multitude.

With the possible exception of having some celebrity status and have everybody talking to \*you\*!

What's missing in these exchanges is a sense of connectedness with the other person or persons.

A few of us can in some cases speak for 15 minutes and be compelling, but most of us don't pay attention to most speakers for most than a couple minutes. Taking notes on what the other is saying is fine and I do that, but you can't if you're working on anything more complicated than formatting disks.

If I'm talking to just one person, then the length of transmission varies dynamically with the subject and the progress of the conversation. With a roundtable there's no effective feedback and what I hear are people talking about nothing and not really communicating.

It's a lot easier to communicate a set of thoughts and have a satisfying conversation with one person in, say, the half hour that many of us can fit in, than if we have to wait to join a group and make only one or two transmissions in that period.

This is a major problem with AM style operation - with activity channelized on a couple of frequencies, it's tough to have a one-on-one conversation that I find satisfying. But if I want to use my AM rigs, unless I luck out at a fringe time, I'm in a group of people that says little - I can't reasonably QSY and stay on AM.

That's the problem.

I'm also amused at the "make a transmission" terminology - it's not "Pete, say something i'd respond to" but "Pete, it's your turn to spew".

-Pete  
WB2QLL  
petef@sprynet.com

From boatanchors@theporch.com Thu Oct 24 08:06:25 1996  
From: Jeffrey Herman <jherman@hawaii.edu>  
Subject: Re: ol' buzzards on D-104's  
Message-ID: <Pine.GS0.3.93.961023171811.11492A-100000@uhunix2.its.Hawaii.Edu>

My Elmer, Francis Crew WA6AIG, used to run homebrew AM gear on 220 Mc back in the early 60s. The locals had the "Rag and Tech Net" on that band and were pretty long-winded as I recall. Fran would continue to

work at his bench on his latest project "reading the mail" as the other guys chewed the rag; when it was his turn he'd leave the bench and sit on the sofa (with his Turner mic in hand) and presumably the other guys would then pick up their soldering guns and work as Fran spoke.

There are dozens of projects one can do while listening to a round-table, and the longer the guys talk, the more work you can get done around the shack!

7.3W from Hawaii,  
Jeff KH2PZ / KH6 (ex WA6QIJ)

From boatanchors@theporch.com Thu Oct 24 08:06:25 1996  
From: "William B. Ross" <billross@txdirect.net>  
Subject: Re: ol' buzzards on D-104's  
Message-ID: <326F5866.3F1@txdirect.net>

Jeffrey Herman wrote:

>  
> My Elmer, Francis Crew WA6AIG, used to run homebrew AM gear on 220 Mc  
> back in the early 60s. The locals had the "Rag and Tech Net" on that  
> band and were pretty long-winded as I recall. Fran would continue to  
> work at his bench on his latest project "reading the mail" as the  
> other guys chewed the rag; when it was his turn he'd leave the bench  
> and sit on the sofa (with his Turner mic in hand) and presumably the other  
> guys would then pick up their soldering guns and work as Fran spoke.  
>  
> There are dozens of projects one can do while listening to a round-  
> table, and the longer the guys talk, the more work you can get done  
> around the shack!  
>  
> 7.3W from Hawaii,  
> Jeff KH2PZ / KH6 (ex WA6QIJ)

Hear! Hear!  
Or put another way Listen! Listen! You just might learn something.

Bill K5LLK

From boatanchors@theporch.com Thu Oct 24 08:06:25 1996  
From: wi2p@VNET.IBM.COM  
Subject: Re: ol' buzzards on D-104's  
Message-ID: <199610241218.HAA02943@uro.theporch.com>

> My Elmer, Francis Crew WA6AIG, used to run homebrew AM gear on 220 Mc

> back in the early 60s. The locals had the "Rag and Tech Net" on that  
> band and were pretty long-winded as I recall. Fran would continue to  
> work at his bench on his latest project "reading the mail" as the  
> other guys chewed the rag; when it was his turn he'd leave the bench

This is the way I like to work, myself. My shack and repair bench share the same room. I try to avoid the hit and run conversations so prevalent amongst the more "youthful" members of our hobby. This is probably due to the instant response mentality that has taken over (gotta have a cell phone, pager, answering machine so I don't miss a call from my stockbroker) in today's environment. The current attitude seems to be "get the guys QTH and signal report, log him and the heck with anything else".

I enjoy listening to my on-the-air friends talk about their activities etc, and their "long-windedness" allows me to complete some work with the BA on the bench without having to roll my chair across the room every 5 minutes to take my turn at "making a few comments".

Yes, maybe it is more prevalent amongst the BA/AM crowd. But, as they say about many things, if it bothers you, don't do it! Don't check into the roundtables that go on forever. Nobody's forcing you to listen if you don't want to. What is the real complaint here? Are you using a crystal controlled receiver? There is still plenty of frequency spectrum where you can go to have your own 30 second QSO's. It's like travel. You can do 30 countries in 7 days, or spend a month in Paris. Each to his own.

73, Ray WI2P

From boatanchors@theporch.com Thu Oct 24 12:40:17 1996  
From: "D.D. Todd" <dube3@n-link.com>  
Subject: Re: ol' buzzards on D-104's  
Message-ID: <326FAFBE.27DA@n-link.com>

Heard not too long ago, this SSB "discussion" between what seemed like 3 participants, but may have been more (Names changed to protect the guilty):

"Hey"

(10 second pause) "Yeah?"

(5 second pause) "You heered about ol' Jeb's dog?"

(3 second pause, followed by two talking at the same time)

(5 second pause) "Whazzat, Sam?"

(5 second pause) "Warn't me."

(25 seconds dead air) "What you reckon happened to ol' Luther? I ain't heerd him in a month o' Sundays."

(8 second pause) "I think he went silent key."

(Another long period of dead air, after which I moved on)



It was obvious that these participants knew each other very well and knew their voices; and it was equally obvious that they had nothing whatever to talk about. Reminded me of the old country store where a bunch of old coots would gather every morning around the pot-bellied stove and just sit and spit. I'm not knocking that, mind you, but only throw it out to compare with the "long-winded" AM conversations wherein something is being discussed, however inane. In either case, and all in between, it's somebody's way of enjoying the hobby.

--

Dube Todd

dube3@n-link.com

If we had to tolerate in others all that we permit in ourselves, life would be completely unbearable.

- Georges Courtelline

From boatanchors@theporch.com Thu Oct 24 12:40:17 1996

From: Laird\_Tom\_N@hpmail1.90.deere.com

Subject: Parts BA needed

Message-ID: <H00005a0040d41be@MHS>

A friend of mine, Jim W9UD needs a Viking II parts radio(does not need the cabinet).

He does need a cabinet for the Viking II VFO and a pair of 872 rect. with sockets.

You can either call him direct(309-799-7447) or reply to me and I will pass it the info on to him.

Thanks, Tom Laird WC9M Moline, IL  
TL39597@deere.com

From boatanchors@theporch.com Thu Oct 24 12:40:17 1996

From: Pete McCollum 24-Oct-1996 0813 -0600 <mccollum@ssdevo.ENET.dec.com>

Subject: PRC-40 info needed

Message-ID: <9610241410.AA20293@us3rmc.pa.dec.com>

Hey gang,

Just got an RT-717/PRC-40AX, and I could use some more info on it.

Anyone have a schematic or manual?

Here's what I think I know about it so far, please correct me if this is wrong:

- 132-152 Mhz FM
- low power, maybe 1 watt or so ???
- earlier version used submini tubes, later is all SS and runs from 17VDC
- similar to GE TPL series (what are those?)
- It's built with two main PC boards back-to-back, and the active circuitry is a bunch of plug-in modules with aluminum covers.

In lieu of a manual/schematic, a couple of questions are:

- 1) Why are there two xtal sockets in the receiver?
- 2) What range of xtal frequencies would it be designed for? I.e., 7.333 to 8.444 is one possibility.
- 3) What is the receiver's IF frequency?

Thanks for any help,  
Pete  
mccollum@ssdevo.enet.dec.com

From boatanchors@theporch.com Thu Oct 24 08:06:25 1996  
From: "Robert Fowle (KC8DBC)" <hammarlund@jacksonmi.com>  
Subject: RCA PARTS LIST UPDATE  
Message-ID: <2.2.16.19961024091057.1bdf84de@fvmail.com>

If you like to receive a copy of this list, email me and request it.  
it's about 129 lines long, so i won't post the whole thing here...  
for those who don't know, i recently parted out an RCA BTA 5T  
5 kw a.m. BC xmtr...and have many parts for building....

thnak you

=====]-[->

Robert Fowle KC8DBC  
The HAMMARLUND Historian  
Ph. 517-789-6721  
1215 Winifred  
Jackson, Mich. 49202-1946  
E-mail: hammarlund@jacksonmi.com  
Web Page: <http://www.jacksonmi.com/hammarlund>  
HAMMARLUND LITERATURE WANTED  
WANTED: MANUALS FOR ANY MAKE RADIO EQUIPMENT

=====]-[->

Boatanchors: the list: listproc@theporch.com.....subscribe boatanchors  
<your name>

the news group: rec.radio.amateur.boatanchors  
news group: ham-am@Listserv@ucsd.edu....Body: add ham-am

From boatanchors@theporch.com Thu Oct 24 12:40:17 1996  
From: "Rhett T. George" <rtg@ee.duke.edu>  
Subject: Re: RCA PARTS LIST UPDATE  
Message-ID: <9610241609.AA23074@ferry>

- Robert -

Greetings. I should like to have a copy of the RCA Parts List Update.

Many thanks for sending it along.

73 Rhett - KE4HIH

From boatanchors@theporch.com Thu Oct 24 22:20:48 1996  
From: wb6zwc@ns.net  
Subject: Re: RCA PARTS LIST UPDATE  
Message-ID: <199610242142.0AA23892@tomcat.ns.net>

ok bob

At 08:02 AM 10/24/96 -0500, Robert Fowle (KC8DBC) wrote:

>If you like to receive a copy of this list, email me and request it.  
>it's about 129 lines long, so i won't post the whole thing here...  
> for those who don't know, i recently parted out an RCA BTA 5T  
>5 kw a.m. BC xmtr...and have many parts for building....

>thnak you

>  
>=====]-[->

>Robert Fowle KC8DBC

>The HAMMARLUND Historian

>Ph. 517-789-6721

>1215 Winifred

>Jackson, Mich. 49202-1946

>E-mail: hammarlund@jacksonmi.com

>Web Page: <http://www.jacksonmi.com/hammarlund>

> HAMMARLUND LITERATURE WANTED

>WANTED: MANUALS FOR ANY MAKE RADIO EQUIPMENT

>=====]-[->

>Boatanchors: the list: listproc@theporch.com.....subscribe boatanchors

><your name>

> the news group: rec.radio.amateur.boatanchors  
> news group: ham-am@Listserv@ucsd.edu....Body: add ham-am  
  
>  
>

From boatanchors@theporch.com Thu Oct 24 12:40:17 1996  
From: "Roger A. McCarty" <rmccarty@deltanet.com>  
Subject: Re; Stick in the mud  
Message-ID: <326F7A81.4625@deltanet.com>

This will be my last contribution to the subject as it lies on the extremes of the intent of the list ie; operation of vintage equipment, albeit a non-technical aspect of operation. It did start an exchange of thoughts that I hope we all can benefit.

Interesting responses!

Seems that the majority of the opinions expressed support shorter transmissions, although those in favor of long transmissions had strong support. Even more interestingly, those against long transmissions responded almost immediately whereas those for (long transmissions), took longer to respond. Don't know what it means, just found it interesting.

I would like to respond to a comment, ask a question, and add my opinions.

One person admonished me (not personally, but the original post) for not being willing to listen. He said, "If you want a 30 second qso, qsy" (paraphrased). In the original post, I specifically said, "3 to 5 minutes should be adequate, a shade of grey between this type of transmission and the long winded variety".

Who's not listening?

In addition, whether each is transmitting for 15 minutes or each is transmitting for 5 minutes, seems to me the same amount of listening is going on.

Further, I am far more interested in what others have to say, as opposed to what I have to say. I learn more that way. For whom are you transmitting for? Or better, for whose benefit?

In support of the groups who listen while working or puttering around the shack, Yeah, I understand this. If your in a group that has met for

years under these circumstances, do what you all are comfortable with! Any breakers into the conversation should alter their operating styles to conform to the established group.

On the other hand, please consider this, Some of us (perhaps a majority) have things to do that do not allow us to set aside a two to three hour segment in the evenings for, "listening". We have children responsibilities, job responsibilities, family responsibilities, et al, and to escape for R&R, we fit in an hour or so between one of these responsibilities to rebuild, tweek, and/or operate our boatanchors. (More than that requires I plan in advance and schedule it in, like a vacation!!:-)!!) Doesn't matter if you agree with this lifestyle, sometime it is not a matter of choice, it does matter that you attempt to consider other styles of life.

Of all the responses, I like and support Gene's (Rippen) advice the best;

"If it is that annoying, which I think it is, then:

1. Tell him (it is always a him) that you want to keep it to \_\_?\_\_ minutes, each go around. And, don't try to Weasel by making any excuse, such as "I may have to leave on short notice". We are dealing with grown adults. Just because we have condoned their boring/boaring manners in the past, doesn't mean it must continue.  
or
2. Stop listening, sign off, and move on.

What I am saying is: I am all for AM operating with BA's, and it is my own fault if I allow someone to "bore/boar" me out of enjoyment of my hobby."

That's it for me, thanks for the participation.

Roger A. McCarty  
Riverside, CA USA  
<http://www.accurate1.com>

From boatanchors@theporch.com Thu Oct 24 22:20:48 1996  
From: bill@skeeter.frco.com (William Hawkins)  
Subject: Re: Re; Stick in the mud  
Message-ID: <9610242015.AA21755@skeeter.frco.com>

>From: "Roger A. McCarty" <rmccarty@deltanet.com>

>

>On the other hand, please consider this, Some of us (perhaps a majority)  
>have things to do that do not allow us to set aside a two to three hour  
>segment in the evenings for, "listening". We have children

Perhaps there you have it. By definition, old buzzards are no longer slaves to raising a family. They (not 'we' yet) have a different sense of time. If there weren't so many of us, we could share the spectrum in any way that suited us at our present stage of life.

Regards,  
Bill Hawkins

P.S. If two copies of "What if" show up, I posted the second after a message from mail that said the first one didn't get out.

From boatanchors@theporch.com Thu Oct 24 08:06:25 1996

From: k7yha@juno.com (Richard H. Arland)

Subject: Re: Receiver Alignment

Message-ID: <19961024.002044.4407.0.k7yha@juno.com>

Gang:

Joe Carr, of TAB Books fame, has several good texts out about fixing and aligning ham radio gear. My copy is about 15 years old and is an old black cover, smaller-than-normal format hardbound book I got from the Electronics Book Club many moons ago.

I am sure that there are copies of this or something very close to it, in various ham flea markets. Possibly try TAB Books (check the pages of Pop Elect or Electronics Now for the address and/or phone number), as they mite still have copies or possibly an updated version.

73 es gl

rich K7YHA

From boatanchors@theporch.com Thu Oct 24 08:06:25 1996

From: Tom.Daley@530.gigo.com (Tom Daley)

Subject: relay: fs tubes-n-stuff

Message-ID: <ce3\_9610231849@gigo.com>

please reply to the fellow below - not me ! 73

Message #202 - HAM Radio For Sale  
Date: 10-20-96 13:54:12  
From: Chris Mangus  
To: All  
Subject: Tubes and sockets for sale

Hello all! Several people have enquired about tubes and sockets lately. I finally got off my duff and looked through what I have. This a complete list of what I have with prices where available. Anything not marked I will take an offer on. I also have 2 tube testers, 1 Eico which works and a Hickock 546 which does not. Email me for details on them. Contact information follows the list.

Tube Type	New Price	My Price
=====	=====	=====
1B3GT		
1BC2A		
1K3 x3		
1X2A		
2BE6		
2BU2		
3A3C x2	\$12.00	\$3.00
3BN6		
3BW2/3BS2B/3BT2A		
3CB6		
3CU3A		
3GK5 x8		
3HA5 x2	\$5.50	\$1.40
3HQ5		
3JC6A x2		
3KT6		
4AU6		
4BZ6 x13		
4CB6 x3		
4CS6		
4DT6		
4EH7		
4EJ7		
4HS8 x2		
4JC6 x2		
4JC8		
4JD6		
4KE8		
4KT6		
5AQ5		
5EA8		

5GH8 x7		
5HA5		
5HG6		
5JK6 x2		
5JL6		
5LJ8		
5MB8 x2		
6AF9		
6AL5 x2		
6AU6 x5	\$4.90	\$1.20
6AV6		
6AX4		
6AY3		
6BA6	\$3.90	\$.95
6BE6		
6BH6		
6BL8	\$3.70	\$.90
6BN8		
6BQ5	\$4.90	\$1.20
6BQ6BTB/6CU6		
6BQ7A		
6BZ6 x2		
6CF6 x3	\$3.30	\$.80
6CG7 x5	\$8.90	\$2.20
6CG8A x2		
6CJ3	\$11.41	\$2.80
6CL6		
6CL8A x2		
6CN7		
6CY5		
6DT6 x4		
6EB8		
6EH7 x5		
6EJ7 x5		
6EN4		
6EU8		
6EW6 x4		
6FQ7 x2	\$8.90	\$2.20
6GC5 x2		
6GH8 x3	\$3.50	\$.85
6GK6 x2		
6GM6 x3		
6GT5		
6GU7 x6		
6GW8 x2		
6GY6 x3		
6HA5	\$4.10	\$1.00
6HB7	\$6.20	\$1.50



6HB8		
6HQ5 x3	\$4.50	\$1.10
6HS8		
6HZ6 x3		
6JA5	\$31.50	\$8.00
6JB5		
6JH6 x2		
6JH8 x2		
6JU8 x3		
6K6GT		
6KD8		
6KT8 x7		
6KZ8		
6LE8 x2		
6LN8 x3		
6MD8		
6ME8 x5		
6MN8		
6SN7GTB	\$7.26	\$1.80
6X4		
6X8		
8AC9		
8AW8A		
8BM11		
8FQ7 x6	\$13.70	\$3.40
8JV8 x2		
8LT8 x3	\$11.20	\$2.80
9AU7		
10DX8		
10GF7A		
10GN8		
10JT8 x2		
10LB8		
11HM7		
11KU8		
12AD6		
12AT7 x2	\$4.57	\$1.10
12AU6		
12AU7A	\$4.10	\$1.00
12AV6		
12AX4		
12BL6		
12C5/12CU5		
12EG6		
12FX5		
12HL7 x3	\$11.60	\$2.80
12MD8		
13DR7		

14BR11		
17BE3		
17BF11		
17BS3A		
17CK3		
17D4		
17DQ6B		
17H-B25		
17KV6A		
18FW6A		
21HB5		
21LU8		
23Z9	\$15.19	\$3.70
33GY7 x3	\$17.00	\$4.25
34CE3		
35W4		
36AM3B		
38HK7 x2		
42		
42KN6		

=====  
Offers on anything below.....

Several misc tube shields  
 2 - 4 pin ceramic sockets, used  
 1 - 7 pin 7CM style socket  
 1 - 7 pin unknown style socket, fits 4BZ6  
 1 - 9 pin 9A style socket  
 1 - 9 pin 9FX style socket  
 1 - 9 pin unknown style socket, fits 4JC6  
 4 - 9 pin unknown style socket, fits 6ME8  
 1 - 9 pin unknown style socket, fits 8JV8  
 1 - 10 pin unknown style socket, fits 6LF8, snap mount  
 1 - 12 pin 5F style socket  
 1 - 12 pin 6B style socket  
 1 - 12 pin unknown style socket, fits 6MN8 (modified for only 8 pins)

=====  
 You pay shipping on any of the above which will depend on how you want  
 it shipped (and possibly insured)

Contact me at [cmangus@mhiconn.net](mailto:cmangus@mhiconn.net), echomail here, netmail at 1:347/7  
 or voice at (208)832-2572 after 5pm MDT

Chris Mangus

>--- GEcho 1.00

> \* Origin: Orwell's Vision BBS, PRN/SurvNet (208)832-7099 (1:347/7)

--

: Fidonet: Tom Daley 1:203/530 .. speaking for only myself.

: Internet: Tom.Daley@530.gigo.com

From boatanchors@theporch.com Thu Oct 24 12:40:17 1996

From: "Paul Bock" <pauboc@smtpblink.pulse.com>

Subject: Re[2]: Surplus Conversion Manuals: Vol. I & III

Message-ID: <9609248461.AA846174302@smtpblink.pulse.com>

Just a public note to thank Doug, WJ5J, for an absolutely splendiferous copying job on the subject manuals. I received mine yesterday and now have them three-hole punched and in a binder. The quality is excellent! Now, if I could just get my Vol. II back from Raymond Cote, I'd be all set.....

Bravo Zulu, Doug!

73,

Paul, K4MSG

From boatanchors@theporch.com Thu Oct 24 22:20:48 1996

From: "Jim Berry" <basalop@eskimo.com>

Subject: Re: RX alignment

Message-ID: <199610241857.LAA22328@mail.eskimo.com>

> Date: Wed, 23 Oct 1996 20:05:30 -0500 (CDT)

> Reply-to: brainbol@idir.net

> From: Bob/WB0AUQ <brainbol@idir.net>

> To: Multiple recipients of list <boatanchors@theporch.com>

> Subject: RX alignment

> One of my early, hard-learned, lessons on alignment was to  
> place the rig, normal position, on a sheet of metal while  
> doing the tweaking. Else you might discover that if done  
> on an insulated surface then inserted into it's metal cabinet  
> things just aren't quite the same. Have discovered that just  
> a sheet of aluminum foil works adequately. Happy Tweaking..  
> Bob/WB0AUQ/KS

>

Good advice. One I was taught was to terminate things. If the receiver was designed to see a 50 ohm antenna, put a 50 ohm resistor across the antenna terminal. Little things, but things I never forgot.

73 Jim K7SLI

\*\*\*

Jim Berry K7SLI. QTH: Marysville, Wa (Near Seattle)

Email: basalop@eskimo.com FAX: 360-659-1360

Ham Digital: K7SLI @ K7SLI.#NWWA.WA.USA.NA

\*\*\*

From boatanchors@theporch.com Thu Oct 24 08:06:25 1996

From: John Kolb <jlkolb@cts.com>

Subject: Re: SAQ - N.G. from Atlanta

Message-ID: <Pine.SC0.3.91.961023215109.29731C-100000@sd.cts.com>

Well, like everyone else, I didn't here SAQ here near San Diego, but it was fun trying.

The HP and Rycom wave analyzers (freq selective voltmeters) didn't seem sensitive enough, so put a balanced mixer and local oscillator ahead of my R-390. Put up a new antenna, a 80 ft long wire, and ran it through a 3 section 200 kHz low pass filter. Tried a LogiMetrics signal generator for a local oscillator at first but found it had far too much phase noise for use as a rx LO, so used a very nice 10 MHz reverence oscillator received from Bob Ogburn, who said he would send me some of his bench sweepings in return for a manual copy - thanks, Bob.

Minimum detectable signal with this setup was 0.02 uV, though measurments made at these low levels are rather suspect if not made using double shielded cables, etc.

Figured I was in trouble though - WWVH was never that far out of the noise. I would expect I would have to have them booming in with a setup that could receive Europe on VLF. Did hear a number of the RTTY stations on the low freqs, but not sure exactly how to measure their freq ( center freq between mark and space? ) to ID them, or where to find the master list to find them on. Seems like VLF signals were stronger years ago when I had a R-389, even with much less of an antenna.

73

John

From boatanchors@theporch.com Thu Oct 24 12:40:17 1996  
From: "Bob Ragain, 303-470-2534, RAGAIN@SEDALIA.OMNES.SLB.COM"  
<RAGAIN@hubvx6.sedalia.wireline.slb.com>  
Subject: SAQ followup  
Message-ID: <961024101852.25058554@hubvx6.sedalia.wireline.slb.com>

Fellow BA'ers,

The Alexanderson Alternator, SAQ, experiment has been one of the most fun projects I've followed in a long time. Thanks to all for the observations and descriptions of your rx setups. Too bad SAQ shut down so early while the world continued to tweak. Wonder what the power bill was for that on-the-air time?

At least someone heard it in the Boston area. Living near Denver, I don't feel too bad about the signal not getting this far. The preparation for the attempt was still great fun and I got to work with a couple of great Elmers, Greg Burnett and Tom Annes, who loaned me the HP test set and receivers!

The loop antenna built for this project seemed to work well. It's 3 ft in diameter and 140 turns of number 24 (19 x 36) thinly insulated wire. Tuning for resonance was with 3 sections x 350 pF variable cap. Final version's tuning range was from about 15.5 kHz up to about 25 kHz.

The end connections of the loop's parallel LC circuit attach to the center conductors of two equal lengths of RG-62 (high impedance, low capacitance) coax which connected to the 7A22 differential plugin of a Tek 7603 'scope. The shields of the coax leads were grounded only on the scope end. The 50 Ohm vertical output on the back of the 'scope fed the different receiver schemes.

The loop and 'scope part of the setup worked really well, especially being able to use line triggering to freeze local line noise to watch what was going on between the noise spikes. As mentioned in an earlier post, I was able to copy WWVB at 60 kHz (on an earlier version of the loop) by watching the baseline jump. In that noisy location, WWVB peaked at 60 mv in between noise spikes of 100 mv. A receiver "heard" only noise but the visual copy was easy.

I moved out in the country for the SAQ transmission and the noise peaks were down to only 4 mv P-P. The only negative was that the display of the 'scope shrank as the temperature outside at 0200 dropped into the 20's and I had to rely more on the aural instead of visual! And I forgot my gloves!

Had some interference from intermod (cross mod?) from BCB stations in the Denver area. The mix of difference frequencies between BCB stations was coming out in the VLF range. A low pass filter might have helped.

Three different receivers were tried: An HP 3586 frequency selective voltmeter (not sensitive enough or selectivity was TOO good), a Specific Products model VLA comparator receiver (fixed tuned to old 18 kHz WWVL which proved to be too far away from 17.2 and no time for a retune and synthesizer bypass) and a Mackay Marine Receiver type 128AW regen set.

The old Mackay regen receiver worked great and brought back my days of sitting in front of an Ocean Hopper! A backup/comparison wire antenna was muchly inferior to the loop and was barely used. It was 200 feet of wire run out through the trees with 500 feet of grounded chain link fence was used as a counterpoise.

Hope we get to do this again sometime!

Bob

-----  
Bob Ragain WB4ETT Littleton, CO

From boatanchors@theporch.com Thu Oct 24 22:20:48 1996  
From: "Benjamin D. Hall" <BDHall@ghgcorp.com>  
Subject: Re: SAQ followup  
Message-ID: <326FCAEA.B77@ghgcorp.com>

Bob Ragain, 303-470-2534, RAGAIN@SEDALIA.OMNES.SLB.COM wrote:

> The Alexanderson Alternator, SAQ, experiment has been one of the most fun  
> projects I've followed in a long time.

Just wanted to comment that I've had a great time reading about people's set-ups and such, and was wanting to get out there myself. Except I live near Houston, and I have too much hash to even hear a navaid in nearby Galveston on 500 kHz much less something down on 17.2 kHz.

Reminds me of when I lived in Alabama, and built myself a 10.2 to 18.0 or so kHz wideband "whistler" receiver to listen to electrical discharge phenomenon. Usually, I could hear the pings well as we were out in the country away from downtown Huntsville. However, power noise was still enough to drown the delicate "whistlers." However, hurricane Opal solved that when it knocked down power for a 20 mile radius! I was so excited! But alas, there weren't any whistlers that morning, boo hoo hoo...

Anyone who is going "huh?" can write me and I'll send you a three message long series of posts by Steve McGreevy on whistlers and "natural" radio. It is pretty cool. Maybe I'll try to build a Ba version, it does use a

FET front end...

73,

Ben

--

\*\*\*\*\*  
\* Benjamin D. Hall, Houston Texas \*  
\* BDHall@GHGCorp.com BHall@GP802.jsc.nasa.gov \*  
\*\*\*\*\*

From boatanchors@theporch.com Thu Oct 24 08:06:25 1996

From: Spencer Petri <spetri@e-tex.com>

Subject: SK-900

Message-ID: <m0vGFSe-0002GJC@e-tex.com>

Hello gang,

Anyone got any of the above sockets squirreled away from bygone days? Fits 4X500.

73 de Pete WA5JCI

From boatanchors@theporch.com Thu Oct 24 22:20:48 1996

From: "Bob Ragain, 303-470-2534, RAGAIN@SEDALIA.OMNES.SLB.COM"

<RAGAIN@hubvx6.sedalia.wireline.slb.com>

Subject: Source of left-handed drill bits

Message-ID: <961024152441.25058554@hubvx6.sedalia.wireline.slb.com>

Subj: RE: Left hand bits

Hi Mark,

Source for left handed drill bits:

The store is A & A Trading Post in Littleton, Colorado. Their phone number is 303-761-0747. The sizes they carry are odd, like 5/64th, 7/64th, and some others. Maybe that's because they are intended to go down inside holes of a more "normal" size without reaming out the threads?

Current price is \$6.99 ea for those two sizes mentioned above. Kind of high compared to regular bits. I should have asked what material the bits are made of.

If for some reason you try to order and their handling charges are too high, or they don't want to ship, etc, let me know and I'll pick 'em up and stick 'em in the mail at my cost.

I'll copy this to Boatanchors in case anyone else is interested. Good luck.

Bob

=====  
From: SNDSN1::IN%"k5am@lascruces.com" "Mark Mandelkern" 24-OCT-1996  
14:50:50.12  
To: IN%"RAGAIN@sedalia.omnes.slb.com"  
CC:  
Subj: Left hand bits

Bob -

That's great news! Can you give us their phone number?

73,

Mark, K5AM, DM62ni, k5am@lascruces.com

Mark Mandelkern  
Las Cruces, New Mexico, USA

From boatanchors@theporch.com Thu Oct 24 12:40:17 1996  
From: "Ray L. Mote" <rmote@rain.org>  
Subject: SP-600 recapping C A U T I O N  
Message-ID: <Pine.SUN.3.95.961024093922.19944C-100000@coyote.rain.org>

It's been so long ago that I can't recall whether I tackled the RF box or not (the one bolted to the side of the main tuning cap and bandswitch enclosure). I \*do\* recall being told by my mentor at the time that I should be \*very\* careful in removal/replacement of that box. I believe the box has contacts that engage bandswitch contacts, and there is a danger of ruining (forever!) the bandswitch if not done correctly. (Is there an SP-600 doctor in the house who can confirm this?) Think the trick was to position the bandswitch halfway between detents for removal and for reinstallation, thus avoiding the tendency to foul up the contacts.

This technique may be contained in the MIL tech manual on the SP-600-JX series, although I've never seen it in the plain old



Hammarlund JX manual.

73.....Ray Mote, K5FKT <rmote@rain.org> Oxnard, CA ex-W6RIC

From boatanchors@theporch.com Thu Oct 24 12:40:17 1996  
From: "Robert Fowle (KC8DBC)" <hammarlund@jacksonmi.com>  
Subject: Re: SP-600 recapping C A U T I O N  
Message-ID: <2.2.16.19961024134559.1b1f64a2@fvmail.com>

that is correct. that box has the \*thin\* fin's the fingers rotate into to make the contact. they are very fragile if not delt with properly....B e w a r e & procede with extreme caution.....it will be like doing brain surgery, one "oop's" and that'll be all she wrote....

as many as i have done, i have never attempted to remome that section from the main section, best to leave them bolted together...do what you can and go on.  
my 2 cents FWIW

At 11:49 AM 10/24/96 -0500, Ray L. Mote wrote:

>It's been so long ago that I can't recall whether I tackled the RF box  
>or not (the one bolted to the side of the main tuning cap and  
>bandswitch enclosure). I \*do\* recall being told by my mentor at the  
>time that I should be \*very\* careful in removal/replacement of that  
>box. I believe the box has contacts that engage bandswitch contacts,  
>and there is a danger of ruining (forever!) the bandswitch if not done  
>correctly. (Is there an SP-600 doctor in the house who can confirm  
>this?) Think the trick was to position the bandswitch halfway between  
>detents for removal and for reinstallation, thus avoiding the tendency  
>to foul up the contacts.

>

>This technique may be contained in the MIL tech manual on the  
>SP-600-JX series, although I've never seen it in the plain old  
>Hammarlund JX manual.

>

>73.....Ray Mote, K5FKT <rmote@rain.org> Oxnard, CA ex-W6RIC

>

>

>

=====]-[->

Robert Fowle        KC8DBC  
The HAMMARLUND Historian  
Ph. 517-789-6721  
1215 Winifred  
Jackson, Mich. 49202-1946  
E-mail: hammarlund@jacksonmi.com  
Web Page: <http://www.jacksonmi.com/hammarlund>

HAMMARLUND LITERATURE WANTED

WANTED: MANUALS FOR ANY MAKE RADIO EQUIPMENT

=====]-[->

Boatanchors: the list: listproc@theporch.com.....subscribe boatanchors  
<your name>

the news group: rec.radio.amateur.boatanchors

news group: ham-am@Listserv@ucsd.edu....Body: add ham-am

From boatanchors@theporch.com Thu Oct 24 22:20:48 1996  
From: Bill Coleman WF2A <wf2awdc@ibm.net>  
Subject: re: SP-600 recapping C A U T I O N  
Message-ID: <BMSMTP8461922720wf2awdc@pop03.ny.us.ibm.net>

Ray is right on... the instructions are quite good - set the bandswitch  
mid-way between two bands. You could probably get away with not doing this on  
the removal, but if you forget when you replace the RF strip - CRUNCH!!

Also, these contacts look quite fragile and are exposed once the RF strip is  
removed - be careful.

73, Bill

> From: "Ray L. Mote" <rmote@rain.org>, on 10/24/96 02:09 PM:  
> It's been so long ago that I can't recall whether I tackled the RF box  
> or not (the one bolted to the side of the main tuning cap and  
> bandswitch enclosure). I \*do\* recall being told by my mentor at the  
> time that I should be \*very\* careful in removal/replacement of that  
> box. I believe the box has contacts that engage bandswitch contacts,  
> and there is a danger of ruining (forever!) the bandswitch if not done  
> correctly. (Is there an SP-600 doctor in the house who can confirm  
> this?) Think the trick was to position the bandswitch halfway between  
> detents for removal and for reinstallation, thus avoiding the tendency  
> to foul up the contacts.  
>  
> This technique may be contained in the MIL tech manual on the  
> SP-600-JX series, although I've never seen it in the plain old

> Hammarlund JX manual.  
>  
> 73.....Ray Mote, K5FKT <rmote@rain.org> Oxnard, CA ex-W6RIC  
>  
>  
>  
>  
> -----  
Bill Coleman (WF2A)  
-----  
Email: wf2a@ibm.net

From boatanchors@theporch.com Thu Oct 24 22:20:48 1996  
From: mknudsen@lucent.com  
Subject: Re: SP-600 recapping C A U T I O N  
Message-ID: <9610242123.AA04110@bock.ih.lucent.com>

Yes, I know I read somewhere official that you should park the BSw  
halfway between two bands while moving the box.

I think you can also avoid trouble by pulling out all the coil strips,  
just like an old turret TV tuner, but this may not be good enough,  
and would be extra work and you'd probly get them mixed up.

I recall there is a point in the removal/re-installation where you must  
be very careful not to turn the BSw knob or you will destroy the contact  
springs "beyond repair" to quote the manual.

No, I haven't tried it (yet). 73, mike k aa9rg

From boatanchors@theporch.com Thu Oct 24 22:20:48 1996  
From: Cal Eustaquio N6KYR <ceustaqu@dot.w6bhz.calpoly.edu>  
Subject: Telegraph item needs ID  
Message-ID: <Pine.SUN.3.91.961024123029.26870A-1000000@dot.w6bhz.calpoly.edu>

Does anyone know what a T.R. McElroy telegraph recorder is used for  
(specific purpose or system)? I stepped across this three-tube job (uses  
type 117\*\* tubes). I haven't the foggiest notion of how to use it. Any  
clues? Cal, N6KYR.

From boatanchors@theporch.com Thu Oct 24 22:20:48 1996  
From: Neal McEwen <nmcewen@metronet.com>  
Subject: Re: Telegraph item needs ID  
Message-ID: <32700C3E.2055@metronet.com>

Cal Eustaquio N6KYR wrote:

> Does anyone know what a T.R. McElroy telegraph recorder is used for  
> (specific purpose or system)? I stepped across this three-tube job (uses  
> type 117\*\* tubes). I haven't the foggiest notion of how to use it. Any  
> clues? Cal, N6KYR.

Believe these were made in the 40s. They were actually used for recording high speed radio-telegraphy. There should be an input on it for a receiver's audio. McElroy was the world's champion telegrapher, radio-telegrapher and typist from 1919 to 1939. He capitalized on his fame by making a line of keys and bugs and other such code related instruments, starting in the mid 30s. During WWII he sold a lot of stuff to the govt. Your device should have paper tape and some reels to hold it and pull it while a pen makes dots and dashes on the paper. Old Ted also sold automatic code sending equipment that sent in excess of 100 words per minute.

Ted could listen to the sound of the equipment to see if it was working correctly. The rest of the staff had to use a scope.

Ted's code record of 75 wpm, set in 1939 in Ashville, NC stood for many years and was only recently broken by one of the local ops, K5F0.

See my web page shown below for some bibliographical references to Ted and his keys.

--

73 de K5RW, Neal McEwen nmcewen@metronet.com - Richardson, TX (Dallas)  
WWW Page for Telegraph Key Collectors and Historians  
<http://fohnix.metronet.com/~nmcewen/ref.html>

From boatanchors@theporch.com Thu Oct 24 22:20:48 1996  
From: Nick England <nick@cs.unc.edu>  
Subject: The Heathkit Virtual Museum  
Message-ID: <199610241850.0AA07910@altair.cs.unc.edu>

I don't know who put this together but it is definitely fun!

<http://www.cyberventure.com/heath.html>

The Heathkit Virtual Museum

From boatanchors@theporch.com Thu Oct 24 22:20:48 1996  
From: wb6zwc@ns.net  
Subject: Re: Touch-up paint for Collins S-Line/KWM gear  
Message-ID: <199610242142.0AA23872@tomcat.ns.net>

Check Surplus Sales of Nebraska. He has both colors in cans of spray and is specially formulated for color match.

At 12:58 PM 10/23/96 -0500, Stuart Renes wrote:

>As posted previously, the Testors "Model Master" series of hobby paint "Navy  
>Gloss Gray" is a perfect Collins S-Line front panel touch-up paint. I've also  
>found that their "Gloss Gull Gray" is a perfect match for the outer trim  
ring of  
>this equipment.

>

>Does anyone have a match for the cabinet color of this gear?

>

>Thanks,

>Stuart, WA5EBQ.

>\*\*\*\*\*

> Stuart Renes | DSC Communications

> (972) 519-4411 | 600 Data Drive, ISD05

> stuartr@saturn.dsccc.com | Plano, TX. 75075

>\*\*\*\*\*

>

>

From boatanchors@theporch.com Thu Oct 24 22:20:48 1996

From: David Adams <adamsclan@netgate.net>

Subject: Re: Unbuilt Scope

Message-ID: <326FA8FC.782C@netgate.net>

Well, I now have the rest of the kit and manual and order form in hand.

Get this:

It is an RCA model 825 kit, sold by Bell and Howell made by heath. Does anyone know what model heath the rca 825 corresponds to? Big sucker.

Lotsa tubes and Lotsa 'lytics...may have to consider desoldering and reforming the caps...

(The two circuit boards have had all the caps installed).

73 de dave, n9uxu

From boatanchors@theporch.com Thu Oct 24 12:40:17 1996

From: Terry Dobler KJ7F <kj7f@micron.net>  
Subject: Visit to the "Old Technology Shop" - Seattle, Wa  
Message-ID: <2.2.16.19961024112641.23cfd05e@micron.net>

Gang,

I was in Seattle yesterday and managed to slip out at lunch and visit the "Old Technology Shop". If you visit Seattle and have the time it is worth the visit.

The shop is not large and there were none of the radios that get talked about on the group. There were lots of parts that had been pulled from units. Transformers, capacitors, transmitting caps, and variable caps. There was even a tuning mechanism from some sort of old HRO, knob and all. The variable capacitor was in good shape but the knob was pretty beat up. Had an asking price of \$25. There were all sorts of tube sockets and 9 pin headers, couldn't find any 7 pin. He has drive belts for older sets and various Millen transformers and a BFO, all NOS. There was at least one tube tester and all sorts of test equipment for things I had never seen and have no idea what they did. Lets see, there were old telephones, one just like the wall phone my parents had when I was a kid. He had a fair selection of old books as well.

The address is 7712 Aurora Ave. North and his hours are 12:30 to 6 - Wednesday thru Saturday and Sunday from 2 till 6PM. His business card says that he buys and sells vintage audio equipement (had some HH Scott amps and tuners as well as a Heathkit tuner), bicycles (need a front caliper brake?), cameras (saw some lenses but no cameras), Radios (did have an old Zenith floor radio amoung others), Scientific Instruments and tools.

Terry KJ7F

PS I have no connection with the gentleman, just visited his shop.

kj7f@micron.net (Boise, Idaho) <http://netnow.micron.net/~kj7f>

From boatanchors@theporch.com Thu Oct 24 22:20:48 1996  
From: bill@skeeter.frco.com (William Hawkins)  
Subject: What if  
Message-ID: <9610241940.AA21580@skeeter.frco.com>

What if the high frequency alternator was never replaced by power vacuum tubes, but was replaced by solid state devices?

Only the most avid collector would have as many as three in his garage.

Boatanchor list posts would look like this:

How do I align a Marconi XV32? Chalk marks on the shaft, or laser bore sight?

Guess those old buzzards never let up on the key because it takes so long to spin up the generator.

When I recap the bearings, should I use a new gasket?

I use Pennzoil, so that my transmitted signal sounds better.

Anybody got a manual for a Kohler 200Z?

Regards,  
Bill Hawkins

From boatanchors@theporch.com Thu Oct 24 22:20:48 1996  
From: Richard Hager <rhager@millcomm.com>  
Subject: Re: What if  
Message-ID: <32701EB6.4F02@millcomm.com>

William Hawkins wrote:

> Boatanchor list posts would look like this:  
> How do I align a Marconi XV32? Chalk marks on the shaft, or laser  
> bore sight?  
>  
> Guess those old buzzards never let up on the key because it takes  
> so long to spin up the generator.

snip rest of great post...

Thanks Bill, that cracked me up!

--

Richard Hager

+ Ah-ha! Design Group, Inc. -  
+ Precision CNC Technology, since 1991 -  
+ 612-641-1797, Fax: 612-641-8681 -  
+ "I just like to build stuff" So... -  
+ for CNC info, don't email me, call -

+ or email Ah-ha! directly. Thanks! -  
+ www.gdic.com/ahha email: ahha@gdic.com -

From boatanchors@theporch.com Thu Oct 24 22:20:48 1996  
From: bill@skeeter.frco.com (William Hawkins)  
Subject: What if ...  
Message-ID: <9610241609.AA21280@skeeter.frco.com>

What if the high frequency alternator was never replaced by power vacuum tubes, but was replaced by solid state devices?

Only the most avid collector would have as many as three in his garage.

Boatanchor list posts would look like this:

How do I align a Marconi XV32? Chalk marks on the shaft, or laser bore sight?

Guess those old buzzards never let up on the key because it takes so long to spin up the generator.

When I recap the bearings, should I use a new gasket?

I use Pennzoil, so that the transmission sounds better.

Anybody got a manual for ...

Regards,  
Bill Hawkins

From boatanchors@theporch.com Thu Oct 24 22:20:48 1996  
From: "Andy Howard, WA4KCY" <102452.362@CompuServe.COM>  
Subject: Wireless Set No. 19 Spares Case  
Message-ID: <961024182950\_102452.362\_DHT70-1@CompuServe.COM>

Wireless Set No. 19 Spares Case and all spares except 2. Top needs refinishing. Other OK. Spares covered with cloth jackets.

Anyone have an interest in this?

Thanks,

Andy Howard, WA4KCY  
wa4kcy@usa.net



From boatanchors@theporch.com Thu Oct 24 12:40:17 1996  
From: DEE ALMQUIST <SOUNDNMIND@rica.net>  
Subject: WT: KRONHITE MANUAL  
Message-ID: <19961024144148000.AAA259@har-dialin-32.rica.net>

Hello to all again  
I am in need of a service manual for a Kronhite DCA-50R industrial amp. Will gladly pay for your good copy.  
Thanks  
Dee, W4PNT  
PATTY AND DEE'S MARINA, COLLECTORS OF BOATANCHORS AND TUBES

From boatanchors@theporch.com Thu Oct 24 12:40:17 1996  
From: DEE ALMQUIST <SOUNDNMIND@rica.net>  
Subject: WT: MATCHING TRANSF.  
Message-ID: <19961024143734750.AAA320@har-dialin-32.rica.net>

Hi gang  
I am looking for a high grade audio matching transformer (very odd Z) 200ohm to 8ohm voice coil. This needs to be able to pass 20 hz at 30+ watts. Any one know of such an animal??  
Dee, W4PNT

PATTY AND DEE'S MARINA, COLLECTORS OF BOATANCHORS AND TUBES.

From boatanchors@theporch.com Thu Oct 24 12:40:17 1996  
From: DEE ALMQUIST <SOUNDNMIND@rica.net>  
Subject: WT: TECH INFO FOR M B ELECTRONICS AMP  
Message-ID: <19961024144711781.AAA433@har-dialin-32.rica.net>

Hi all  
Some time ago (last winter) a couple of us were looking for tech info for a M B Electronics MB2120 shaker table amp. I am still in need of this info. ANY ONE have a lead as to where I can find a manual? ANY info would be appreciated.  
Dee, W4PNT

PATTY AND DEE'S MARINA, COLLECTORS OF BOATANCHORS AND TUBES.

From boatanchors@theporch.com Thu Oct 24 12:40:17 1996

From: Mikhael Brown <mikhael@hpcmmp13.sj.hp.com>  
Subject: WTB BC-610 Junct. Bx  
Message-ID: <199610241732.AA109168343@hpcmmp13.sj.hp.com>

Need help comleting the restoration of my BC-610. I am in need of  
the JB-70 Junction box and the crystal holder box.

If you have any of the above, let me know. (510) 505-5582 or e-mail me.

73

Mike N6WIG

--

mikhael@hpcmmp13.sj.hp.com

From boatanchors@theporch.com Thu Oct 24 12:40:17 1996  
From: Mikhael Brown <mikhael@hpcmmp13.sj.hp.com>  
Subject: WTB HA-8 Splatter Guard  
Message-ID: <199610241733.AA109308403@hpcmmp13.sj.hp.com>

Title says it all. Need a Hallicrafters HA-8 Splatter  
guard. If you have one for sale or trade, let me know.

Mike N6WIG

--

mikhael@hpcmmp13.sj.hp.com